

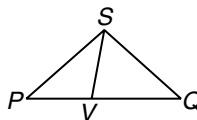
# 5 Chapter 5 Test, Form 2D (continued)

12. Write the assumption you would make to start an indirect proof for the following.

**Given:**  $V$  is not the midpoint of  $\overline{PQ}$ ;

$$\angle P \cong \angle Q.$$

**Prove:**  $\overline{SV} \perp \overline{PQ}$

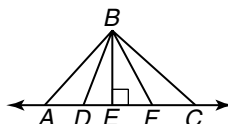


12. \_\_\_\_\_

13. If the lengths of two sides of a triangle are 14 feet and 29 feet, then the third side must have a length between what two measures?

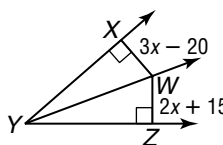
13. \_\_\_\_\_

14. Find the shortest distance from  $B$  to  $\overline{AC}$ .



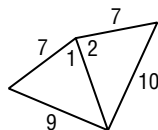
14. \_\_\_\_\_

15. If  $\overline{YW}$  bisects  $\angle XYZ$ , find  $x$ .



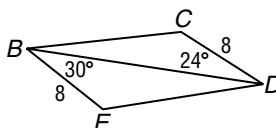
15. \_\_\_\_\_

16. Write an inequality comparing  $m\angle 1$  and  $m\angle 2$ .



16. \_\_\_\_\_

17. Write an inequality comparing  $BC$  and  $ED$ .



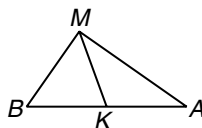
17. \_\_\_\_\_

**For Questions 18–20, complete the proof below by supplying the missing information for each corresponding location.**

**Given:**  $K$  is the midpoint of  $\overline{AB}$ .

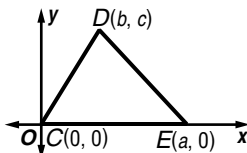
$$m\angle MKB < m\angle MKA$$

**Prove:**  $MB < AM$



Statements	Reasons	
1. $K$ is the midpoint of $\overline{AB}$ ; $m\angle MKB < m\angle MKA$ .	1. Given	18. _____
2. $\overline{BK} \cong \overline{KA}$	2. (Question 18)	19. _____
3. $\overline{MK} \cong \overline{MK}$	3. (Question 19)	20. _____
4. $MB < AM$	4. (Question 20)	

**Bonus** Write an equation in slope-intercept form for the perpendicular bisector of  $\overline{CE}$ .



B: \_\_\_\_\_